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Digital Object Identifier 10.1109/16.8794  
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- ☐ 6. MOSFET effective dimensions determination for VLSI process evaluation  
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[Microelectronic Test Structures, 1989. ICMTS 1989. Proceedings of the 1989 International Conference 13-14 March 1989](#) Page(s):61 - 64  
Digital Object Identifier 10.1109/ICMTS.1989.39282  
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- ☐ 7. Measurement of Minimum-Geometry MOS Transistor Capacitances  
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- ☐ 9. Hot carrier evaluation of MOSFETs in ULSI circuits using the photon emission method  
Uraoka, Y.; Tsutsu, N.; Morii, T.; Tsuji, K.;  
[Electron Devices, IEEE Transactions on](#)  
Volume 40, Issue 8, Aug. 1993 Page(s):1426 - 1431  
Digital Object Identifier 10.1109/16.223701  
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- ☐ 10. Application specific 1200V planar and trench IGBTs  
Shenoy, P.M.; Shekhawat, S.; Brockway, B.;  
[Applied Power Electronics Conference and Exposition, 2006. APEC '06. Twenty-First Annual IEEE 19-23 March 2006](#) Page(s):5 pp.  
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[Power Electronics, IEEE Transactions on](#)  
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14. Subthreshold current of dual-gate MOSFET's  
Barsan, R.M.;  
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Ogura, S.; Tsang, P.J.; Walker, W.W.; Critchlow, D.L.; Shepard, J.F.;  
[Solid-State Circuits, IEEE Journal of](#)  
Volume 15, Issue 4, Aug 1980 Page(s):424 - 432  
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Chang, H.-R.; Temple, V.A.K.; Balliga, B.J.;  
[Electron Devices, IEEE Transactions on](#)  
Volume 35, Issue 12, Dec 1988 Page(s):2459 - 2460  
Digital Object Identifier 10.1109/16.8904  
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17. A closed-loop evaluation and validation of a method for determining the scattering limited c-  
MOSFETs  
Lee, S.-W.; Chan, T.-Y.;  
[Electron Devices, IEEE Transactions on](#)  
Volume 37, Issue 11, Nov. 1990 Page(s):2388 - 2394  
Digital Object Identifier 10.1109/16.62297  
[AbstractPlus](#) | Full Text: [PDF](#)(588 KB) [IEEE JNL](#)  
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18. Observation of MOSFET degradation due to electrical stressing through gate-to-source and  
capacitance measurement  
Yeow, Y.T.; Ling, C.H.; Ah, L.K.;  
[Electron Device Letters, IEEE](#)  
Volume 12, Issue 7, July 1991 Page(s):366 - 368  
Digital Object Identifier 10.1109/55.103609  
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19. Performance of thin-film transistors on polysilicon films grown by low-pressure chemical va  
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Dimitriadis, C.A.; Coxon, P.A.; Dozsa, L.; Papadimitriou, L.; Economou, N.;  
[Electron Devices, IEEE Transactions on](#)  
Volume 39, Issue 3, March 1992 Page(s):598 - 606  
Digital Object Identifier 10.1109/16.123484  
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20. New generation 1200 V power module with trench gate IGBT and super soft recovery diode  
Lwamoto, H.; Kawakami, A.; Satoh, K.; Takahashi, H.; Nakaoka, M.;  
[Electric Power Applications, IEE Proceedings-](#)  
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**21. Temperature dependence of drain-induced barrier lowering in deep submicrometre MOSFET**

Fikry, W.; Ghibaudo, G.; Dutoit, M.;

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Volume 30, Issue 11, 26 May 1994 Page(s):911 - 912

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**22. Conduction in ohmic region of submicrometre MOSFET**

Tong, K.Y.;

[Circuits, Devices and Systems, IEE Proceedings G](#)

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Volume 39, Issue 3, Part 1-2, June 1992 Page(s):372 - 375  
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Dimitriadis, C.A.; Coxon, P.A.; Dozza, L.; Papadimitriou, L.; Economou, N.;  
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**14. Temperature dependence of drain-induced barrier lowering in deep submicrometre MOSFET**

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Tong, K.Y.;

[Circuits, Devices and Systems, IEE Proceedings G](#)

Volume 136, Issue 5, Oct 1989 Page(s):260 - 262

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**16. Application specific 1200V planar and trench IGBTs**

Shenoy, P.M.; Shekhawat, S.; Brockway, B.;

[Applied Power Electronics Conference and Exposition, 2006. APEC '06. Twenty-First Annual IEEE](#)  
19-23 March 2006 Page(s):5 pp.

Digital Object Identifier 10.1109/APEC.2006.1620532

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## 1. Analytical model for p-channel MOSFETs

Moon, B.; Park, C.; Rho, K.; Lee, K.; Shur, M.; Fjeldly, T.A.;

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### 1 [A static power model for architects](#)



J. Adam Butts, Gurindar S. Sohi

December 2000

**Proceedings of the 33rd annual ACM/IEEE international symposium on Microarchitecture MICRO 33**

Publisher: ACM Press

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### 2 [Double-gate SOI devices for low-power and high-performance applications](#)

K. Roy, H. Mahmoodi, S. Mukhopadhyay, H. Ananthan, A. Bansal, T. Cakici

 May 2005 **Proceedings of the 2005 IEEE/ACM International conference on Computer-aided design ICCAD '05**

Publisher: IEEE Computer Society

Full text available: pdf(783.31 KB) Additional Information: [full citation](#), [abstract](#)

Double-gate (DG) transistors have emerged as promising devices for nano-scale circuits due to their better scalability compared to bulk CMOS. Among the various types of DG devices, quasi-planar SOI FinFETs are easier to manufacture compared to planar double-gate devices. DG devices with independent gates (separate contacts to back and front gates) have recently been developed. DG devices with symmetric and asymmetric gates have also been demonstrated. Such device options have direct implications ...

### 3 [From Electron Mobility to Logical Structure: A View of Integrated Circuits](#)



Wesley A. Clark

September 1980 **ACM Computing Surveys (CSUR)**, Volume 12 Issue 3

Publisher: ACM Press

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### 4 [Power reduction techniques for microprocessor systems](#)

Vasanth Venkatachalam, Michael Franz

September 2005 **ACM Computing Surveys (CSUR)**, Volume 37 Issue 3



**Publisher:** ACM PressFull text available: pdf(602.33 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Power consumption is a major factor that limits the performance of computers. We survey the "state of the art" in techniques that reduce the total power consumed by a microprocessor system over time. These techniques are applied at various levels ranging from circuits to architectures, architectures to system software, and system software to applications. They also include holistic approaches that will become more important over the next decade. We conclude that power management is a ...

**Keywords:** Energy dissipation, power reduction

## 5 Managing leakage power: Analysis and minimization techniques for total leakage considering gate oxide leakage



Dongwoo Lee, Wesley Kwong, David Blaauw, Dennis Sylvester

June 2003 **Proceedings of the 40th conference on Design automation DAC '03****Publisher:** ACM PressFull text available: pdf(217.28 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper we address the growing issue of gate oxide leakage current ( $I_{gate}$ ) at the circuit level. Specifically, we develop a fast approach to analyze the total leakage power of a large circuit block, considering both  $I_{gate}$  and subthreshold leakage ( $I_{sub}$ ). The interaction between  $I_{sub}$  and  $I_{gate}$  complicates analysis in arbitrary CMOS topologies and we propose simple and accurate heuristics based on table look-ups to quickly estimate the state-dependent total leakage current within 1% of SPICE ...

## 6 Delay optimization of combinational static CMOS logic



M. Hofmann, J. K. Kim

October 1987 **Proceedings of the 24th ACM/IEEE conference on Design automation DAC '87****Publisher:** ACM PressFull text available: pdf(864.63 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Several methods for increasing the speed of combinational static CMOS circuits, including techniques for partitioning gates on the basis of circuit complexity and input arrival time, are described. The target layout style is standard cell, rather than a PLA or gate matrix scheme. Use of a standard-cell-like image allows a two-level buffered hierarchy to be introduced which is beneficial to reducing circuit delays. Preliminary results from device sizing algorithms are also given. The device ...

## 7 Is nanoelectronics the future of microelectronics?



Mark Lundstrom

August 2002 **Proceedings of the 2002 international symposium on Low power electronics and design ISLPED '02****Publisher:** ACM PressFull text available: pdf(241.10 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We examine current research in nanoelectronics and discuss the role it may play in future electronic systems.

**Keywords:** Moore's Law, molecular electronics, nanoelectronics



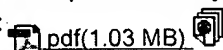
8 Deep Sub-Micron IDDQ Testing: Issues and Solutions

M. Sachdev

March 1997 **Proceedings of the 1997 European conference on Design and Test EDTC '97**

**Publisher:** IEEE Computer Society

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The effectiveness of I/sub DDQ/ testing in deep sub-micron is threatened by the increased transistor sub-threshold leakage current. In this article, we survey possible solutions and propose a deep sub-micron I/sub DDQ/ test mode. The methodology provides means for unambiguous measurements of I/sub DDQ/ components and defect diagnosis. The effectiveness of the test mode is demonstrated with a real life example.

**Keywords:** CMOS integrated circuits, deep submicron IDDQ testing, transistor sub-threshold leakage current, defect diagnosis, CMOS IC

9 Layout tools for analog ICs and mixed-signal SoCs: a survey

Rob A. Rutenbar, John M. Cohn

May 2000 **Proceedings of the 2000 international symposium on Physical design ISPD '00**

**Publisher:** ACM Press

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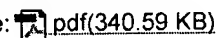
10 Emerging technologies and designs for low power: Analysis of super cut-off transistors for ultralow power digital logic circuits

Arijit Raychowdhury, Xuanyao Fong, Qikai Chen, Kaushik Roy

October 2006 **Proceedings of the 2006 international symposium on Low power electronics and design ISLPED '06**

**Publisher:** ACM Press

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Super cut-off devices with sub-60mV/decade subthreshold swings have recently been demonstrated and being extensively studied. This paper presents a feasibility analysis of such tunneling devices for ultralow power subthreshold logic. Analysis shows that this device can deliver 800X higher performance (@iso-IOFF) compared to a MOSFET. The possible use of this device as a sleep transistor in conjunction with the regular Si MOSFET shows 2000X average improvement in leakage power compared to Si MOSF ...

**Keywords:** carbon nanotube FETs, tunneling transistors

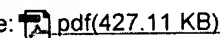
11 Spin MOSFETs as a basis for spintronics

Satoshi Sugahara, Masaaki Tanaka

May 2006 **ACM Transactions on Storage (TOS)**, Volume 2 Issue 2

**Publisher:** ACM Press

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This article reviews a recently proposed new class of spin transistors referred to as spin metal-oxide-semiconductor field-effect transistors (spin MOSFETs), and their integrated circuit applications. The fundamental device structures, operating principle, and theoretically predicted device performance are presented. Spin MOSFETs potentially exhibit significant magnetotransport effects, such as large magneto-current, and also satisfy important requirements for integrated circuit applications suc ...



**Keywords:** MOSFETs, Spintronics, spin MOSFETs, spin transistors

12 Technologies and devices for low power: Modeling and analysis of total leakage currents in nanoscale double gate devices and circuits



Saibal Mukhopadhyay, Keunwoo Kim, Ching-Te Chuang, Kaushik Roy

August 2005 **Proceedings of the 2005 international symposium on Low power electronics and design ISLPED '05**

**Publisher:** ACM Press

Full text available: pdf(485.85 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper we model (numerically and analytically) and analyze sub-threshold, gate-to-channel tunneling, and edge direct tunneling leakage in Double Gate (DG) devices. We compare the leakage of different DG structures, namely, doped body symmetric device with polysilicon gates, intrinsic body symmetric device with metal gates and intrinsic body asymmetric device with different front and back gate material. It is observed that, use of (near-mid-gap) metal gate and intrinsic body devices signif ...

**Keywords:** SRAM, double-gate devices, estimation, gate leakage, quantum effect, stacking effect, subthreshold leakage

13 Low power circuits and microarchitectures: Utilizing reverse short channel effect for optimal subthreshold circuit design



Tae-Hyoung Kim, Hanyong Eom, John Keane, Chris Kim

October 2006 **Proceedings of the 2006 international symposium on Low power electronics and design ISLPED '06**

**Publisher:** ACM Press

Full text available: pdf(1.93 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The impact of the Reverse Short Channel Effect (RSCE) on device current is stronger in the subthreshold region due to the reduced Drain-Induced-Barrier-Lowering (DIBL) and the exponential dependency of current on threshold voltage. This paper describes a device size optimization method for subthreshold circuits utilizing RSCE to achieve high drive current, low device capacitance, less sensitivity to random dopant fluctuations, and better subthreshold swing. Simulation results using ISCAS benchma ...

**Keywords:** PVT variations, digital circuits, optimization, reverse short channel effect, subthreshold circuits, subthreshold operation

14 Power minimization in IC design: principles and applications



Massoud Pedram

January 1996 **ACM Transactions on Design Automation of Electronic Systems (TODAES)**, Volume 1 Issue 1

**Publisher:** ACM Press

Full text available: pdf(550.02 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Low power has emerged as a principal theme in today's electronics industry. The need for low power has caused a major paradigm shift in which power dissipation is as important as performance and area. This article presents an in-depth survey of CAD methodologies and techniques for designing low power digital CMOS circuits and systems and describes the many issues facing designers at architectural, logical, and physical levels of design abstraction. It reviews some of the techniques and tool ...




**Keywords:** CMOS circuits, adiabatic circuits, computer-aided design of VLSI, dynamic power dissipation, energy-delay product, gated clocks, layout, low power layout, low power synthesis, lower-power design, power analysis and estimation, power management, power minimization and management, probabilistic analysis, silicon-on-insulator technology, statistical sampling, switched capacitance, switching activity, symbolic simulation, synthesis, system design

15 A set of programs for MOS design

G. Sakauye, A. Lubiw, J. Royle, R. Epplert, J. Twidale, E. Shew, E. Attfield, F. Brglez, P. Wilcox

June 1981 **Proceedings of the 18th conference on Design automation DAC '81**

**Publisher:** IEEE Press

Full text available:  pdf(778.19 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A set of programs used in the design of custom hand packed and standard cell MOS circuits is described. The programs cover logic simulation, filter analysis, circuit simulation, timing simulation, circuit extraction from layout, design tolerance checking, connectivity checking and user interface facilities. A cell documentation system is used to tie together the various design support packages.

16 Power optimization of large-scale circuits: Analysis and optimization of gate leakage current of power gating circuits

Hyung-Ock Kim, Youngsoo Shin

January 2006 **Proceedings of the 2006 conference on Asia South Pacific design automation ASP-DAC '06**

**Publisher:** ACM Press

Full text available:  pdf(151.22 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

Power gating is widely accepted as an efficient way to suppress subthreshold leakage current. Yet, it suffers from gate leakage current, which grows very fast with scaling down of gate oxide. We try to understand the sources of leakage current in power gating circuits and show that input MOSFETs play a crucial role in determining total gate leakage current. It is also shown that the choice of a current switch in terms of polarity, threshold voltage, and size has a significant impact on total leakage current.

17 Challenges and design choices in nanoscale CMOS

Siva G. Narendra

March 2005 **ACM Journal on Emerging Technologies in Computing Systems (JETC)**, Volume 1 Issue 1

**Publisher:** ACM Press

Full text available:  pdf(5.35 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The driving force for the semiconductor industry growth has been the elegant scaling nature of CMOS technology. In this article, we will first review the history of technology scaling that follows Moore's law from the perspective of microprocessor designs. Challenges to continue the historical scaling trends will be highlighted and design choices to address two specific challenges, process variation and leakage power, will be discussed. In nanoscale CMOS technology generations, supply and threshold voltage are critical design parameters.

**Keywords:** CMOS, leakage power, nanoscale, process variation

18 Low power digital circuits design: Total leakage power optimization with improved mixed gates

Frank Sill, Frank Grassert, Dirk Timmermann





September 2005 **Proceedings of the 18th annual symposium on Integrated circuits and system design SBCCI '05**

**Publisher:** ACM Press

Full text available: pdf(288.69 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Gate oxide tunneling current  $I_{gate}$  and sub-threshold current  $I_{sub}$  dominate the leakage of designs. The latter depends on threshold voltage  $V_{th}$  while  $I_{gate}$  vary with the thickness of gate oxide layer  $T_{ox}$ . In this paper, we propose a new method that combines approaches of Dual Threshold CMOS (DTCMOS), mixed-Tox CMOS, and pin-reordering. As the reduction of leakage leads to an increase of gate delay, our purpose is the reduction of total leakage at constant design performance. We modified a given t ...

**Keywords:** MVT, leakage currents, threshold voltage

19 Topological Analysis for Leakage Prediction of Digital Circuits

Wenjie Jiang, Vivek Tiwari, Erik de la Iglesia, Amit Sinha

January 2002 **Proceedings of the 2002 conference on Asia South Pacific design automation/VLSI Design ASP-DAC '02**

**Publisher:** IEEE Computer Society

Full text available: pdf(115.48 KB)

Additional Information: [full citation](#), [abstract](#), [citations](#)



[Publisher Site](#)

Subthreshold leakage current is becoming an increasingly significant portion of the power dissipation in microprocessors due to technology and voltage scaling. Techniques to estimate leakage at the full chip level are indispensable for power budget allocation. In addition, simple and practical approaches and rules of thumb are needed to allow leakage to become part of the vocabulary of all designers. This paper focuses on the impact of circuit topology on leakage, which is often abstracted throu ...

20 Session 32: logic synthesis I: Gate sizing: finFETs vs 32nm bulk MOSFETs



Brian Swahn, Soha Hassoun

July 2006 **Proceedings of the 43rd annual conference on Design automation DAC '06**

**Publisher:** ACM Press

Full text available: pdf(800.60 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

FinFET devices promise to replace traditional MOSFETs because of superior ability in controlling leakage and minimizing short channel effects while delivering a strong drive current. We investigate in this paper gate sizing of finFET devices, and we provide a comparison with 32nm bulk CMOS. Wider finFET devices are built utilizing multiple parallel fins between the source and drain. Independent gating of the finFET's double gates allows significant reduction in leakage current. We perform temper ...

**Keywords:** FinFET, gate sizing, thermal modeling

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- #1 ((insulated gate type transistor?)<in>metadata)
- #2 insulated<sentence>transistor? and evaluat\*<paragraph>transistor?
- #3 ((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<AND>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata))
- #4 (((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<and>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata))<AND>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<and>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata)) and channel width)
- #5 ((((((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<and>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata))<and>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor? and evaluat\*<paragraph>transistor?<in>metadata)) and channel width))<AND>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<and>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata))<and>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor? and evaluat\*<paragraph>transistor?<in>metadata)) and channel width) and threshold voltage)
- #6 ((((((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<and>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata))<and>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor? and evaluat\*<paragraph>transistor?<in>metadata)) and channel width))<AND>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor?)<and>(insulated gate<sentence>transistor? and evaluat\*<paragraph>transistor?<in>metadata))<and>(((insulated<sentence>transistor? and evaluat\*<paragraph>transistor? and evaluat\*<paragraph>transistor?<in>metadata)) and channel width) and threshold voltage)
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- #8 insulated gate<sentence>transistor? and drain current method?
- #9 insulated gate<sentence>transistor? and drain current method?


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L1 yamaguchi.in. and (insulated gate type transistor? with evaluation)

9 L1

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## Hit List

First Hit

Search Results - Record(s) 1 through 9 of 9 returned.

☐ 1. Document ID: US 20040098681 A1

L1: Entry 1 of 9

File: PGPB

May 20, 2004

PGPUB-DOCUMENT-NUMBER: 20040098681

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040098681 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: May 20, 2004

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Yamaguchi, Kenji

Tokyo

JP

US-CL-CURRENT: 716/4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 2. Document ID: US 20030113946 A1

L1: Entry 2 of 9

File: PGPB

Jun 19, 2003

PGPUB-DOCUMENT-NUMBER: 20030113946

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030113946 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: June 19, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Yamaguchi, Kenji

Tokyo

JP

US-CL-CURRENT: 438/17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 3. Document ID: US 20020130679 A1



L1: Entry 3 of 9

File: PGPB

Sep 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020130679  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020130679 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: September 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
<u>Yamaguchi</u> , Kenji	Tokyo		JP

US-CL-CURRENT: 324/769

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 20020127749 A1

L1: Entry 4 of 9

File: PGPB

Sep 12, 2002

PGPUB-DOCUMENT-NUMBER: 20020127749  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020127749 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: September 12, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
<u>Yamaguchi</u> , Kenji	Tokyo		JP

US-CL-CURRENT: 438/18; 438/17, 438/275

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 6727724 B2

L1: Entry 5 of 9

File: USPT

Apr 27, 2004

US-PAT-NO: 6727724  
DOCUMENT-IDENTIFIER: US 6727724 B2

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: April 27, 2004

## INVENTOR-INFORMATION:



NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Yamaguchi</u> ; Kenji	Tokyo			JP

US-CL-CURRENT: 324/769; 324/719

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Abstracts	Claims	KMC	Draw De
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☐ 6. Document ID: US 6649430 B2

L1: Entry 6 of 9

File: USPT

Nov 18, 2003

US-PAT-NO: 6649430

DOCUMENT-IDENTIFIER: US 6649430 B2

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: November 18, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Yamaguchi</u> ; Kenji	Tokyo			JP

US-CL-CURRENT: 438/17; 438/275

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Abstracts	Claims	KMC	Draw De
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☐ 7. Document ID: US 6559672 B2

L1: Entry 7 of 9

File: USPT

May 6, 2003

US-PAT-NO: 6559672

DOCUMENT-IDENTIFIER: US 6559672 B2

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: May 6, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Yamaguchi</u> ; Kenji	Tokyo			JP

US-CL-CURRENT: 324/769; 324/719

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Abstracts	Claims	KMC	Draw De
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☐ 8. Document ID: US 6373274 B1

L1: Entry 8 of 9

File: USPT

Apr 16, 2002



US-PAT-NO: 6373274

DOCUMENT-IDENTIFIER: US 6373274 B1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: April 16, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yamaguchi; Kenji	Tokyo			JP

US-CL-CURRENT: 324/769; 324/719

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De
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☐ 9. Document ID: US 6169415 B1

L1: Entry 9 of 9

File: USPT

Jan 2, 2001

US-PAT-NO: 6169415

DOCUMENT-IDENTIFIER: US 6169415 B1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: January 2, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yamaguchi; Kenji	Tokyo			JP

US-CL-CURRENT: 324/769; 324/719

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Term	Documents
YAMAGUCHI	39181
YAMAGUCHIS	0
INSULATED	215612
INSULATEDS	0
GATE	515963
GATES	238867
TYPE	3319059
TYPES	1668490



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DATE: Friday, January 19, 2007

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<input type="checkbox"/>	L1	insulated gate type transistor	263

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☐ 1. Document ID: US 20040098681 A1

L2: Entry 1 of 12

File: PGPB

May 20, 2004

PGPUB-DOCUMENT-NUMBER: 20040098681

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040098681 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: May 20, 2004

## INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Yamaguchi, Kenji

Tokyo

JP

US-CL-CURRENT: 716/4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 2. Document ID: US 20040037148 A1

L2: Entry 2 of 12

File: PGPB

Feb 26, 2004

PGPUB-DOCUMENT-NUMBER: 20040037148

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040037148 A1

TITLE: MIS semiconductor device having improved gate insulating film reliability

PUBLICATION-DATE: February 26, 2004

## INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Hidaka, Hideto

Hyogo

JP

US-CL-CURRENT: 365/223

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 3. Document ID: US 20030113946 A1



L2: Entry 3 of 12

File: PGPB

Jun 19, 2003

PGPUB-DOCUMENT-NUMBER: 20030113946  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030113946 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: June 19, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Yamaguchi, Kenji	Tokyo		JP

US-CL-CURRENT: 438/17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 4. Document ID: US 20020130679 A1

L2: Entry 4 of 12

File: PGPB

Sep 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020130679  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020130679 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: September 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Yamaguchi, Kenji	Tokyo		JP

US-CL-CURRENT: 324/769

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 5. Document ID: US 20020127749 A1

L2: Entry 5 of 12

File: PGPB

Sep 12, 2002

PGPUB-DOCUMENT-NUMBER: 20020127749  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020127749 A1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

PUBLICATION-DATE: September 12, 2002

## INVENTOR-INFORMATION:



NAME	CITY	STATE	COUNTRY
Yamaguchi, Kenji	Tokyo		JP

US-CL-CURRENT: 438/18; 438/17, 438/275

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMNC	Draw De
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☐ 6. Document ID: US 20020024059 A1

L2: Entry 6 of 12

File: PGPB

Feb 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020024059  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020024059 A1

TITLE: MIS semiconductor device having improved gate insulating film reliability

PUBLICATION-DATE: February 28, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Hidaka, Hideto	Hyogo		JP

US-CL-CURRENT: 257/189

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMNC	Draw De
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☐ 7. Document ID: US 6816418 B2

L2: Entry 7 of 12

File: USPT

Nov 9, 2004

US-PAT-NO: 6816418  
DOCUMENT-IDENTIFIER: US 6816418 B2

TITLE: MIS semiconductor device having improved gate insulating film reliability

DATE-ISSUED: November 9, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hidaka, Hideto	Hyogo			JP

US-CL-CURRENT: 365/189.09; 365/185.23, 365/201, 365/226

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMNC	Draw De
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☐ 8. Document ID: US 6727724 B2

L2: Entry 8 of 12

File: USPT

Apr 27, 2004



US-PAT-NO: 6727724  
DOCUMENT-IDENTIFIER: US 6727724 B2

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: April 27, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yamaguchi; Kenji	Tokyo			JP

US-CL-CURRENT: 324/769; 324/719

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De
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☐ 9. Document ID: US 6649430 B2

L2: Entry 9 of 12

File: USPT

Nov 18, 2003

US-PAT-NO: 6649430  
DOCUMENT-IDENTIFIER: US 6649430 B2

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: November 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yamaguchi; Kenji	Tokyo			JP

US-CL-CURRENT: 438/17; 438/275

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De
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☐ 10. Document ID: US 6559672 B2

L2: Entry 10 of 12

File: USPT

May 6, 2003

US-PAT-NO: 6559672  
DOCUMENT-IDENTIFIER: US 6559672 B2

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: May 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yamaguchi; Kenji	Tokyo			JP

US-CL-CURRENT: 324/769; 324/719



Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw De
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☐ 11. Document ID: US 6373274 B1

L2: Entry 11 of 12

File: USPT

Apr 16, 2002

US-PAT-NO: 6373274

DOCUMENT-IDENTIFIER: US 6373274 B1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: April 16, 2002

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Jan 2, 2001

US-PAT-NO: 6169415

DOCUMENT-IDENTIFIER: US 6169415 B1

TITLE: Characteristic evaluation apparatus for insulated gate type transistors

DATE-ISSUED: January 2, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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US-CL-CURRENT: 324/769; 324/719

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw De
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